

SCIENTIFIC PROGRAM

26th Annual West Coast Chromatin and Chromosomes Conference

**December 9-12, 2004
Asilomar Conference Grounds**



Organizers

Mike Goldman Jeff Hansen Cynthia McMurray

On the web

<http://online.sfsu.edu/~mgoldman/2004WCCCM.htm>

Please ask for the location of the opening reception and all sessions when you check in at the Front Desk in the Asilomar Administration Building.

ALL SPEAKERS:

****Plan for a 15 minute presentation + 5 additional minutes for questions****

Please remember to bring a floppy disk (or other electronic media) with your abstract for publication in a special issue of BIOCHEMISTRY AND CELL BIOLOGY

Opening Social:

Thursday, December 9, 2004: 4:30 pm – 6:00 pm

Note: Soft drinks, beer, wine, and snacks will be served in the meeting room by Asilomar personnel from **5-6 pm on Friday and Saturday nights**, and from **9-11 pm on Thursday-Saturday nights**.

Thursday, December 9, 2004: 7:00 pm – 10:00 pm

7:00 - 7:15 pm

Welcome!

7:15 -7:45 pm

Food for thought:

Anthony T. Annunziato

Boston College

Split decision: What happens to nucleosomes during DNA replication?

7:45–10:00 pm

REMODELING, HISTONE VARIANTS, AND MODIFICATIONS

David Clark, Chairperson

David Clark

National Institute of Child Health and Human Development

The SWI/SNF and ISWI remodeling machines cooperate to remodel yeast *HIS3* chromatin

Sara S. Dirsherl

University of Alaska, Anchorage

Impaired eye development and cataract formation in *Xenopus* embryos lacking functional ISWI

Anita A. Thambirajah

University of Victoria

Structural characteristics of different chromatin states containing the histone variant H2A.Z

-- 15 min break --

Katherine Dunn
University of Manitoba/Manitoba Institute of Cell Biology
Phosphorylation of histone H3 following stimulation of the Ras-MAPK pathway

Andra Li
University of Victoria
Mimicking phosphorylation of H2AX. Does the nucleosome bother?

Alan Underhill
University of Alberta
Dynamics of histone lysine methylation in mouse development

9:00-11:00 p.m. - Social

Friday, December 10, 2004: 9:00 am – 12:00 noon

NUCLEAR ENZYMES

John Denu, Chairperson

Christopher Berndsen
University of Wisconsin, Madison
Mechanistic studies of Esa1

Zhao-xia Chen
Beckman Research Institute, City of Hope
Characterization of the self-association of human de novo DNA methyltransferases, DNMT3A and DNMT3B

Robert Dutnall
University of California, San Diego
Making soluble histones in bacteria – and – how does Hat1 modify histone H4?

Olivera Grubisha
University of Wisconsin, Madison
Molecular mechanism of Sir2 histone/protein deacetylases

-- 15 min break --

Adam Garste
University of Wisconsin, Madison
Development of combinatorial acetylated, peptide libraries to probe HDAC substrate specificity

Jocelyn E. Krebs
University of Alaska, Anchorage
Histone modifications distinguish different pathways of DNA double strand break repair

John Tainer
The Scripps Research Institute
Chromatin and recombination – the Rad50 connection

Martin Toussaint
Universite de Sherbrooke, Canada
DNA repair of UV damage in yeast; effect of *SIR2* deletion

Friday, December 10, 2004: 5:00 pm – 6:00 pm
Social

Friday, December 10, 2004: 7:00 pm – 10:00 pm

NUCLEAR STRUCTURE AND FUNCTION

Joel Gottesfeld, Chairperson

Harald Biessmann
University of California, Irvine
Heterochromatin at *Drosophila* telomeres

Antonio Conconi
Universite de Sherbrooke, Canada
UV-induced DNA lesions cause RNA polymerase I arrest and the deposition of nucleosomes on the active ribosomal genes in yeast

Charles D. Laird
University of Washington
Epigenetic methylation of DNA at the fragile X locus, FMR1: Insights from analyzing both strands of individual DNA molecules

Diane P. Genereux
University of Washington/Emory University
How are distinct epigenetic methylation patterns maintained during cell division?

-- 15 min break --

Joel Gottesfeld
The Scripps Research Institute
Blocking cancer proliferation by small molecule gene regulation

Nancy P. Thorogood
University of British Columbia
Characterization of XIST expression and localization in a human/mouse somatic cell hybrid system

Alexandra Weyrich
Chinese Academy of Sciences
Expression of human DNA-methylase Dnmt3b in the male germ line of *Drosophila*

Wolfgang Hennig
Chinese Academy of Sciences
A maternal-effect of dE2f1 mutation of *Drosophila melanogaster*

9:00-11:00 p.m. - Social

Saturday, December 11, 2004: 8:45 am – 12:00 noon

NUCLEAR PROTEINS
Jocelyn E. Krebs, Chairperson

Alex Ball
UC-Irvine
Characterization of human condensin's non-SMC components

Hui-Ching Kuo
University of Alaska, Anchorage
Spt10 and histone H2A cooperate to regulate copper homeostasis

Gareth Corry
University of Alberta
Examining the relationship between homeodomain DNA binding, chromatin interaction, and subnuclear localization

Adelina Prado
Unidad de Biofisica CSIC-UPV/EHU
The biological activity of nucleoplasmin: How many partners?

--15 min break--

Rocio Montes De Oca
Johns Hopkins Medical School
Selective binding of barrier – to – autointegration factor to core histone H3 and linker histone H1.1

Jamy Peng
University of California, Berkeley
Su(var)3-9 and HP1 regulate the 3-dimensional organization of rDNA

Ming Ye
Cross Cancer Institute
Effect of Ras expression on the dynamics of histone H1 binding to chromatin *in vivo*

Feixiong Zhang
Capital Normal University, Beijing
The transcription localization of RNA polymerase III is in or at the edge of the nucleolus

Saturday, December 11, 2004: 5:00 pm – 6:00 pm
Social

Saturday, December 11, 2004: 7:00 pm – 9:30 pm

CHROMATIN STRUCTURE

Juan Ausio, Chairperson

Ralph C. Bash
Arizona State University
Recognition imaging of chromatin structure

Stuart Lindsay
Arizona State University
AFM imaging of chromatin structure

Daniel LoVullo
Arizona State University
A FRET-based probe to monitor nucleosome conformational and sequence dependent features

--15 min break--

Nicholas Adkins
Marshall University
Potential links between cell differentiation in salivary glands and chromatin remodeling

Terace M. Fletcher
University of Miami School of Medicine
The role of DNA structure in telomere function

Jeff Hayes
University of Rochester
Inter-nucleosome and inter-fiber contacts by the H3 tail domain

Missag H. Parseghian
Peregrine Pharmaceuticals
Missag Parseghian's model of H1 subtype distribution in chromatin: How well is it faring in light of recent observations?

9:00-11:00 p.m. - Social

Sunday, December 12, 2004: 9:10 am – 10:30 am

SUNDAY BRUNCH

Cynthia McMurray, Chair

Sally Pasion

San Francisco State University

Fission yeast *cdc24* replication mutant exhibits synthetic genetic interactions with checkpoint kinases
the active ribosomal genes in yeast

Michael J. Hendzel

University of Alberta

The relationship between chromatin dynamics and the cytoskeleton

Caroline M. Kane

University of California, Berkeley

Factorology regulating the phosphatase that acts on RNA polymerase II

Guoliang Xu

Chinese Academy of Sciences

Chromatin targeting of DNA methyltransferases via the PWWP domain